

Application No.: 10/501,259

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Docket No.: 61646(70904)

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Withdrawn) A disease susceptibility gene for rheumatoid arthritis, the gene coding a protein that has an amino acid sequence shown in SEQ. ID NO. 1 and that has such mutation that glycine is inserted as a 269th amino acid in the sequence.
2. (Withdrawn) The gene as set forth in claim 1, having a base sequence shown in SEQ. ID NO. 2, and having such mutation that 3 bases "GGT" are inserted as 805th to 807th bases in the sequence.
3. (Withdrawn) A protein having an amino acid sequence shown in SEQ. ID NO.1, and having such mutation that glycine is inserted as a 269th amino acid in the sequence.
4. (Currently amended) A method of evaluating onset or onset possibility of rheumatoid arthritis in a human subject, the method comprising the step of: detecting the presence or absence of a gene coding a protein comprising the amino acid sequence shown in SEQ. ID NO. 1 in the subject whether mutation of the gene as set forth in claim 1 or 2 occurs or not, and
evaluating the onset or onset possibility of rheumatoid arthritis in the subject.
5. (Withdrawn) A method of evaluating onset or onset possibility of rheumatoid arthritis, the method comprising the step of: detecting whether mutation of the protein as set forth in claim 3 occurs or not.
6. (Withdrawn) An evaluation kit for evaluating onset or onset possibility of rheumatoid arthritis by using the method as set forth in claim 4 or 5, the method

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detecting whether mutation occurs or not.

7. (Currently amended) A method of evaluating onset or onset possibility of rheumatoid arthritis in a human subject, comprising the step of: measuring an amount of an expressed mRNA derived from a disease-susceptibility gene for rheumatoid arthritis, the gene having a base sequence that is as shown in SEQ. ID NO. 2 but deleted of 3 bases "GGT", which are Nos. 805 to 807 bases in the sequence whole Angiopoietin-1 gene, including wild-type Angiopoietin-1 gene and mutant Angiopoietin-1 gene, in the subject; and

evaluating the onset or onset possibility of rheumatoid arthritis in the subject.

8. (Currently amended) The method of evaluating onset or onset possibility of rheumatoid arthritis in a human subject, as set forth in claim 7, wherein: a pair of threshold values 1 and 2 is set with respect to the amount of the expressed mRNA in the subject, the threshold value 1 < the threshold value 2; the threshold value 1 corresponds to the average amount of expressed angiopoietin-1 mRNA in RA subjects and the threshold value 2 corresponds to the average amount of expressed angiopoietin-1 mRNA in normal subjects; if the amount of the expressed angiopoietin-1 mRNA in the subject is equal to or less than the threshold value 1, it is judged that a the subject has possibly developed rheumatoid arthritis highly possibly or has a high possibility that the subject will develop or developing rheumatoid arthritis in the future; and if the amount of the expressed mRNA is equal to or more than the threshold value 2, it is judged that a subject has not developed rheumatoid arthritis unlikely or has a low possibility that the subject will develop or developing rheumatoid arthritis in the future; thereby evaluating the onset or onset possibility of rheumatoid arthritis in the subject.

9. (Withdrawn) A remedy for rheumatoid arthritis, comprising the steps of: supplementing, to a rheumatoid arthritis patient having a protein having the mutation as set forth in claim 3, (a) a normal type protein not having the mutation, (b) DNA coding the normal type protein, or (c) a low molecular weight compound that acts as an agonist for a receptor protein for which the normal protein is a ligand.

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10. (Withdrawn) A curing medicine for use in curing a rheumatoid arthritis patient having a protein having the mutation as set forth in claim 3, the curing medicine containing, as a main component (a) a normal type protein not having the mutation, (b) DNA coding the normal type protein, or (c) a low molecular weight compound that acts as an agonist for a receptor protein for which the normal protein is a ligand.